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(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

9914414.9 22 Jun 9915487.4 3 Jul

22 June 1999 (22.06.1999) GB 3 July 1999 (03.07.1999) GB

- (71) Applicant (for all designated States except US): ROCEP LUSOL HOLDINGS LIMITED [GB/GB]; Rocep Business Park, Kings Inch Road, Deanpark, Renfrew PA4 8XY (GB).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): FRUTIN, Bernard, Derek [GB/GB]; Jaapston Farm, By Uplawmoor, Renfrewshire G78 3BL (GB).
- (74) Agent: MURGITROYD & COMPANY; 373 Scotland Street, Glasgow G5 8QA (GB).

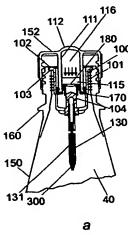
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

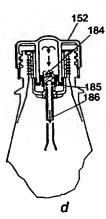
Published:

- With international search report.
- Before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments.

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: DEVICE FOR INTRODUCING A PREDETERMINED DOSE OF ADDITIVE INTO A PACKAGED LIQUID



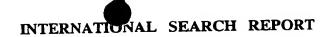


(57) Abstract: The invention relates to an apparatus for introducing an additive material (131) in the form of a liquid or granulated solid into a liquid (40) stored in a first container (150). The additive component (131) is stored separately from the liquid (40) in a dip tube or conduit (130). The dip tube (130) is a resilient hollow tubular member and has a valve (300) at one end, adapted to open when the dip tube (130) is subject to internal pressure to allow the passage of said additive material (131) therethrough. The valve prevents the additive material (131) from leaking or dripping into the liquid (40) in the first container (150) when the dip tube and first container are at the same pressure, but which allows the passage of liquid or pourable solid additive from the dip tube (130) into the liquid (40) in the first container (150) when the dip tube is pressurised by introduction of propellant fluid (116, 516). A second valve (520) can be used to prevent the additive material (131) from leaking or dripping into a second container (150) which is the source of the pressurised propellant fluid (116, 516).

VO 00/78632

Inte. conal Application No PCT/GB 00/02285

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a. classif IPC 7	FICATION OF SUBJECT MATTER B65D51/28 B65D79/00 B65D47/2	20						
According to	International Patent Classification (IPC) or to both national classific	ation and IPC						
B. FIELDS	SEARCHED							
Minimum do IPC 7	cumentation searched (classification system followed by classificati B65D	on symbols)						
Documentat	ion searched other than minimum documentation to the extent that s	such documents are included in	n the fields searched					
Electronic da	ata base consulted during the international search (name of data ba	se and, where practical, searc	th (erms used)					
EPO-In	ternal							
C. DOCUM	ENTS CONSIDERED TO BE RELEVANT							
Category °	Citation of document, with indication, where appropriate, of the rel	levant passages	Relevant to daim No.					
х	WO 98 56678 A (HAWTHORNE DONN BEI ;CARLTON & UNITED BREWERIES (AU) 17 December 1998 (1998-12-17)		1-4,14					
Υ	the whole document		5-11,13, 16					
Y	US 5 725 896 A (BANKS ANTHONY J) 10 March 1998 (1998-03-10) the whole document		5,6,16					
Y	WO 97 21605 A (ROCEP LUSOL HOLDII ;FRUTIN BERNARD D (GB)) 19 June 1997 (1997-06-19) the whole document	NGS	7					
Υ	US 4 592 493 A (SMITH ROBERT C) 3 June 1986 (1986-06-03)		8-11,13					
A	the whole document		12					
<u></u>		-/						
X Furt	ther documents are tisted in the continuation of box C.	Patent family memb	ers are listed in annex.					
"A" docum consid "E" earlier filing "L" docum which	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention. "E" earlier document but published on or after the international filing date. "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified). "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention. "X" document of particular relevance; the claimed invention involve an inventive step when the document is taken alone and only invention. "Y" document of particular relevance; the claimed invention involve an inventive step when the document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document of particular relevance; the claimed invention invention cannot be considered to involve an inventive step when the document of particular relevance; the claimed invention							
°P° docum	**Collater or other special reason (as specified) Cannot be considered to involve an inventive step when the document is combined with one or more other such document is combined with							
<u> </u>	actual completion of the international search	Date of mailing of the int						
3	3 October 2000	20/10/2000						
Name and	Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentiaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fay: (+31-70) 340-3016 Pernice, C							





Inte ional Application No PCT/GB 00/02285

	ation) DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages	 Relevant to claim No.
Category °	Citation of document, with indication, where appropriate, of the relevant passages	
A	EP 0 835 840 A (GUINNESS BREWING WORLDWIDE) 15 April 1998 (1998-04-15) column 13, line 4 - line 43; figures 7,8	1-7
A	US 4 917 267 A (LAVERDURE ROLAND J A) 17 April 1990 (1990-04-17) the whole document	8-13
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Information on patent family members

Inte. .onal Application No PCT/GB 00/02285

Patent document cited in search repo		Publication date	Patent family member(s)	Publication date
WO 9856678	A	17-12-1998	AU 7751498 A AU 7751598 A WO 9856679 A	30-12-1998 30-12-1998 17-12-1998
US 5725896	A	10-03-1998	AT 153961 T AU 684488 B AU 5864194 A CA 2154651 A DE 69403628 D DE 69403628 T DK 680448 T EP 0680448 A ES 2105627 T WO 9416966 A	15-06-1997 18-12-1997 15-08-1994 04-08-1994 10-07-1997 29-01-1998 29-12-1997 08-11-1995 16-10-1997 04-08-1994
WO 9721605	Α	19-06-1997	AU 1182197 A EP 0958187 A	03-07-199 7 24-11-1999
US 4592493	Α	03-06-1986	NONE.	
EP 0835840	A	15-04-1998 ·	GB 2293166 A AU 689619 B AU 3064195 A CA 2158308 A DE 69503446 D DE 69514842 D DE 69514842 T EP 0701966 A ES 2118506 T ES 2143828 T NZ 272996 A	20-03-1996 02-04-1998 28-03-1996 16-03-1996 20-08-1998 15-04-1999 02-03-2000 06-07-2000 20-03-1996 16-09-1998 16-05-2000 29-01-1997
US 4917267	Α	17-04-1990	NONE	

pnal Application No

PCT/GB 00/02285 A. CLASSIFICATION OF SUBJECT MATTER
1PC 7 B65D51/28 B650 B65D47/20 B65D79/00 According to International Patent Classification (IPC) or to both national classification and IPC Minimum documentation searched (classification system followed by classification symbols) IPC 7 B65D Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal C. DOCUMENTS CONSIDERED TO BE RELEVANT Relevant to claim No. Citation of document, with indication, where appropriate, of the relevant passages WO 98 56678 A (HAWTHORNE DONN BEDE 1-4.14Χ :CARLTON & UNITED BREWERIES (AU)) 17 December 1998 (1998-12-17) 5-11,13,Υ the whole document 16 5,6,16 Y US 5 725 896 A (BANKS ANTHONY J) 10 March 1998 (1998-03-10) the whole document 7 WO 97 21605 A (ROCEP LUSOL HOLDINGS ;FRUTIN BERNARD D (GB)) 19 June 1997 (1997-06-19) the whole document 8-11,13Y US 4 592 493 A (SMITH ROBERT C) 3 June 1986 (1986-06-03) 12 the whole document Χ Patent family members are listed in annex. Further documents are listed in the continuation of box C. X Special categories of cited documents: "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such docu-"O" document referring to an oral disclosure, use, exhibition or ments, such combination being obvious to a person skilled in the art. other means document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of mailing of the international search report Date of the actual completion of the international search 20/10/2000 3 October 2000 Authorized officer Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2

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Fax: (+31-70) 340-3016

Pernice, C

Interior on al Application No PCT/GB 00/02285

		PC1/GB 00/02285	
C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT			
ategory °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	
\	EP 0 835 840 A (GUINNESS BREWING WORLDWIDE) 15 April 1998 (1998-04-15) column 13, line 4 - line 43; figures 7,8	1-7	
\	US 4 917 267 A (LAVERDURE ROLAND J A) 17 April 1990 (1990-04-17) the whole document	8-13	
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on on patent family members

Ir Ional Application No PC1/GB 00/02285

Patent document cited in search repor	t	Publication date	Patent family member(s)	Publication date
WO 9856678	A	17-12-1998	AU 7751498 A AU 7751598 A WO 9856679 A	30-12-1998 30-12-1998 17-12-1998
US 5725896	А	10-03-1998	AT 153961 T AU 684488 B AU 5864194 A CA 2154651 A DE 69403628 D DE 69403628 T DK 680448 T EP 0680448 A ES 2105627 T WO 9416966 A	15-06-1997 18-12-1997 15-08-1994 04-08-1994 10-07-1997 29-01-1998 29-12-1997 08-11-1995 16-10-1997 04-08-1994
WO 9721605	Α	19-06-1997	AU 1182197 A EP 0958187 A	03-07-1997 24-11-1999
US 4592493	Α	03-06-1986	NONE	
EP 0835840	A	15-04-1998	GB 2293166 A AU 689619 B AU 3064195 A CA 2158308 A DE 69503446 D DE 69503446 T DE 69514842 D DE 69514842 T EP 0701966 A ES 2118506 T ES 2143828 T NZ 272996 A	20-03-1996 02-04-1998 28-03-1996 16-03-1996 20-08-1998 15-04-1999 02-03-2000 06-07-2000 20-03-1996 16-09-1998 16-05-2000 29-01-1997
US 4917267	Α	17-04-1990	NONE	

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REC'D	2	1	MAR	2001	

WIPO

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's o	r agent's file reference SA/GMU	FOR FURTHER ACTION	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)			
		International filing date (day/mont)	//year) Priority date (day/month/year)			
	application No.	22/06/2000	22/06/1999			
PCT/GB00			22/00/1999			
International B65D51/2		national classification and IPC	·			
Applicant						
''	USOL HOLDINGS LIMI	ΓED et al				
	ternational preliminary exa transmitted to the applican		by this International Preliminary Examining Authority			
2. This R	EPORT consists of a total	of 5 sheets, including this cover s	heet.			
		THE ANDEWED TO THE CO	a description plains and/or descripts which have			
⊔ Th be	is report is also accompan en amended and are the b	ied by ANNEXES, i.e. sheets of the asis for this report and/or sheets of the second control of the second cont	e description, claims and/or drawings which have containing rectifications made before this Authority			
(se	ee Rule 70.16 and Section	607 of the Administrative Instructi	ons under the PCT).			
These	annexes consist of a total	of sheets				
Illese	annexes consist of a total	or sheets.				
3. This re	port contains indications re	elating to the following items:				
1	Basis of the report	·	·			
l II	☐ Priority	•	·			
111	☐ Non-establishment o	f opinion with regard to novelty, in	ventive step and industrial applicability			
IV	Lack of unity of inver					
V	Reasoned statement citations and explana	under Article 35(2) with regard to ations suporting such statement	novelty, inventive step or industrial applicability;			
VI	☐ Certain documents of	cited				
VII	□ Certain defects in the	e international application				
VIII	☑ Certain observations	on the international application				
	•					
Date of subr	nission of the demand	Date of	completion of this report			
12/12/200	00	19.03.2				
	nailing address of the internation	onal Authori	zed officer			
	European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523	Janos	ch, J			

Telephone No. +49 89 2399 7525

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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/GB00/02285

I .	Bas	is	of	the	re	po	rt
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1.	 This report has been drawn on the basis of (substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments (Rules 70.16 and 70.17).): Description, pages: 							
	1-19	•	as originally filed					
	Clai	ms, No.:						
	1-16	3	as originally filed					
	Drawings, sheets:							
	1/3-3/3		as originally filed					
2.	2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.							
	The	se elements were a	evailable or furnished to this Authority in the following language: , which is:					
		the language of a	translation furnished for the purposes of the international search (under Rule 23.1(b)).					
		the language of pu	blication of the international application (under Rule 48.3(b)).					
		the language of a 55.2 and/or 55.3).	translation furnished for the purposes of international preliminary examination (under Rule					
3.	With	n regard to any nuc rnational preliminar	leotide and/or amino acid sequence disclosed in the international application, the y examination was carried out on the basis of the sequence listing:					
		contained in the in	ternational application in written form.					
		filed together with	the international application in computer readable form.					
		furnished subsequ	ently to this Authority in written form.					
		furnished subsequ	ently to this Authority in computer readable form.					
		☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.						
		The statement tha listing has been fu	t the information recorded in computer readable form is identical to the written sequence rnished.					
4.	The	amendments have	e resulted in the cancellation of:					
		the description,	pages:					
		the claims,	Nos.:					

INTERNATIONAL PRELIMINARY **EXAMINATION REPORT**

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International application No. PCT/GB00/02285

		the drawings,	sheets:								
5.		☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):									
		(Any replacement sh report.)	eet contair	ning such	amendn	nents must	be refer	red to unde	ər item 1	and anne	exed to this
6.	Add	itional observations, i	f necessar	y:							
V.		soned statement un tions and explanatio					lty, inve	ntive step	or indus	strial app	licability;
1.	Stat	ement									
	Nov	elty (N)	Yes:	Claims	1-16						

Inventive step (IS)

Claims 1-16 Yes:

No:

Claims

Claims

No:

Claims 1-16 Industrial applicability (IA) Yes:

> No: Claims

2. Citations and explanations see separate sheet

VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted: see separate sheet

VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made: see separate sheet

Re Item V

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Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Reference is made to the following document:

D1: WO 98 56678 A.

2. Document D1, which is considered to represent the most relevant state of the art, discloses (cf. claims 1 and 20, page 4, lines 5-11 and 16-20, page 5, lines 4-7, 27-29, page 6, lines 14-30, page 8, lines 16-22, figures 6-7c, 11-13c) an apparatus for introducing an additive material into a first liquid from which the subject-matter of claim 1 differs in that the conduit contains an additive material adapted to be expelled from the conduit into the first liquid by the entry of the propellant fluid into the conduit on release of the releasable closure. Consequently the subject-matter of claim 1 fulfills the requirement of Art. 33(2) PCT.

The problem to be solved by the present invention may therefore be regarded as to provide an alternative conduit.

The solution proposed in claim 1 of the present application can be considered as involving an inventive step (Article 33(3) PCT), since the cited prior art does not provide any hint that suggests the conduit as defined in claim 1 to the skilled person. From the cited prior art it is not suggested to provide an additive material in the conduit.

- 3. Claims 2-16 are dependent on claim 1 and as such also meet the requirements of the PCT with respect to novelty and inventive step.
- 4. For completeness sake it shall be indicated, that the British Patent Application GB 98 23 578, cited in the description, was filed 29 October 1998. The GB 98 23 578 might be or become relevant state of the art, according to the different national or regional patent laws. At present it appears that GB 98 23 578 discloses all features of claim 1.

Re Item VII

7

Certain defects in the international application

- 1. Independent claim 1 is not in the two-part form in accordance with Rule 6.3(b) PCT, which in the present case would be appropriate, with those features known in combination from the prior art (document D1) being placed in the preamble (Rule 6.3(b)(i) PCT) and with the remaining features being included in the characterising part (Rule 6.3(b)(ii) PCT).
- 2. The features of the claims 1-16 are not provided with reference signs placed in parentheses (Rule 6.2(b) PCT).
- Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art 3. disclosed in the document D1 is not mentioned in the description, nor is this document identified therein.

Re Item VIII

Certain observations on the international application

1. The application is not clear (Art. 6 PCT), since the reference sign 183 added in figure 2 is not correctly placed. It seems to be identical with reference sign 182, thus constituting a contradiction to the description. According to page 13, lines 1-9 and figures 1c and 1d, reference sign 183 relates to the lower sealing rib, which still seals in figure 1d below the apertures 108.



rom the

INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

ROCEP LUSOL HOLDINGS LIMITED et al

MURGITROYD & COMPANY URGITRO OMPANY 373 Scotland Street NOTIFICATION OF TRANSMITTAL OF Glasgow G5 8QA THE INTERNATIONAL PRELIMINARY GRANDE BRETAGNE 2 2 MAR 2001 **EXAMINATION REPORT** (PCT Rule 71.1) Date of mailing tday/month/year) 19.03.2001 Applicant's or agent's file reference IMPORTANT NOTIFICATION P24038A/LSA/GMU International filing date (day/month/year) Priority date (day/month/year) International application No. PCT/GB00/02285 22/06/1999 22/06/2000 Applicant

- 1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
- 2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
- 3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

Name and mailing address of the IPEA/

Authorized officer

Buckley, D

9)

European Patent Office D-80298 Munich

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Fax: +49 89 2399 - 4465

Tel.+49 89 2399-2082





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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

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Applicant's of P24038A/I	r agent's file reference	FOR FURTHER ACTION		tion of Transmittal of International Examination Report (Form PCT/IPEA/416)					
1	application No.	International filing date (day/mo	ntn/year)	Priority date (day/month/year)					
PCT/GB00		22/06/2000		22/06/1999					
International B65D51/2	Patent Classification (IPC) or na 8	tional classification and IPC							
Applicant									
ROCEP LI	USOL HOLDINGS LIMITE	D et al							
1. This int and is t	ternational preliminary exami transmitted to the applicant a	ination report has been prepartice and to Article 36.	ed by this Inter	national Preliminary Examining Authority					
2. This Ri	2. This REPORT consists of a total of 5 sheets, including this cover sheet.								
bed (se	en amended and are the bas	sis for this report and/or sheets 07 of the Administrative Instru	containing red	n, claims and/or drawings which have ctifications made before this Authority e PCT).					
ı	port contains indications rela Basis of the report	ting to the following items:							
	☐ Priority			and industrial applicability					
III IV	_	pinion with regard to novelty,	nventive step a	and industrial applicability					
V			o novelty, inve	ntive step or industrial applicability;					
VI	☐ Certain documents cite	· · · · · · · · · · · · · · · · · · ·							
VII	□ Certain defects in the in	nternational application							
VIII	☐ Certain observations or	n the international application							
Date of subm	ission of the demand	Date	of completion of t	his report					
12/12/2000	0	19.03	.2001						
	ailing address of the internationa xamining authority:	I Autho	rized officer	150 150 150 153 MIDINA					
<u>all</u>	European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656		sch, J	Transcription of the state of t					
	Fax: +49 89 2399 - 4465		hone No. +49 89	2399 7525					

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/GB00/02285

 Basis of the 	he report
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1. This report has been drawn on the basis of (substitute sheets which have been furnished to the recresponse to an invitation under Article 14 are referred to in this report as "originally filed" and are not the report since they do not contain amendments (Rules 70.16 and 70.17).): Description, pages:							
	1-19	9	as originally filed .				
	Cla	ims, No.:					
	1-16	6	as originally filed				
	Dra	wings, sheets:					
	1/3-	3/3	as originally filed				
2.			uage, all the elements marked above were available or furnished to this Authority in the nternational application was filed, unless otherwise indicated under this item.				
	The	se elements were a	vailable or furnished to this Authority in the following language: , which is:				
		the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).					
		the language of publication of the international application (under Rule 48.3(b)).					
		the language of a t 55.2 and/or 55.3).	ranslation furnished for the purposes of international preliminary examination (under Rule				
3.			leotide and/or amino acid sequence disclosed in the international application, the y examination was carried out on the basis of the sequence listing:				
		contained in the inf	ternational application in written form.				
		filed together with	the international application in computer readable form.				
		furnished subsequ	ently to this Authority in written form.				
		furnished subsequently to this Authority in computer readable form.					
			the subsequently furnished written sequence listing does not go beyond the disclosure in oplication as filed has been furnished.				
		The statement that listing has been ful	the information recorded in computer readable form is identical to the written sequence rnished.				
4.	The	amendments have	resulted in the cancellation of:				
		the description,	pages:				
		the claims,	Nos.:				

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/GB00/02285

		the drawings,	sheets:				
5. This report has been established as if (some of) the amendments had not been made, since the considered to go beyond the disclosure as filed (Rule 70.2(c)):							
		(Any replacement she report.)	eet contair	ning such	a amendments must be referred to under item 1 and annexed to this		
6.	Add	itional observations, if	necessar	y:			
V.	. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement						
1.	Stat	ement					
	Nov	elty (N)	Yes: No:	Claims Claims	1-16		
	Inve	entive step (IS)	Yes: No:	Claims Claims	1-16		
	Indu	ıstrial applicability (IA)	Yes: No:	Claims Claims	1-16		

2. Citations and explanations see separate sheet

VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted: see separate sheet

VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made: see separate sheet

Re Item V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Reference is made to the following document: 1.

D1: WO 98 56678 A.

2. Document D1, which is considered to represent the most relevant state of the art, discloses (cf. claims 1 and 20, page 4, lines 5-11 and 16-20, page 5, lines 4-7, 27-29, page 6, lines 14-30, page 8, lines 16-22, figures 6-7c, 11-13c) an apparatus for introducing an additive material into a first liquid from which the subject-matter of claim 1 differs in that the conduit contains an additive material adapted to be expelled from the conduit into the first liquid by the entry of the propellant fluid into the conduit on release of the releasable closure. Consequently the subject-matter of claim 1 fulfills the requirement of Art. 33(2) PCT.

The problem to be solved by the present invention may therefore be regarded as to provide an alternative conduit.

The solution proposed in claim 1 of the present application can be considered as involving an inventive step (Article 33(3) PCT), since the cited prior art does not provide any hint that suggests the conduit as defined in claim 1 to the skilled person. From the cited prior art it is not suggested to provide an additive material in the conduit.

- Claims 2-16 are dependent on claim 1 and as such also meet the requirements of 3. the PCT with respect to novelty and inventive step.
- For completeness sake it shall be indicated, that the British Patent Application GB 4. 98 23 578, cited in the description, was filed 29 October 1998. The GB 98 23 578 might be or become relevant state of the art, according to the different national or regional patent laws. At present it appears that GB 98 23 578 discloses all features of claim 1.

Re Item VII

Certain defects in the international application

- 1. Independent claim 1 is not in the two-part form in accordance with Rule 6.3(b) PCT, which in the present case would be appropriate, with those features known in combination from the prior art (document D1) being placed in the preamble (Rule 6.3(b)(i) PCT) and with the remaining features being included in the characterising part (Rule 6.3(b)(ii) PCT).
- The features of the claims 1-16 are not provided with reference signs placed in 2. parentheses (Rule 6.2(b) PCT).
- Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art _.3. disclosed in the document D1 is not mentioned in the description, nor is this document identified therein.

Re Item VIII

Certain observations on the international application

1. The application is not clear (Art. 6 PCT), since the reference sign 183 added in figure 2 is not correctly placed. It seems to be identical with reference sign 182, thus constituting a contradiction to the description. According to page 13, lines 1-9 and figures 1c and 1d, reference sign 183 relates to the lower sealing rib, which still seals in figure 1d below the apertures 108.



(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference P24038A/GMU	FOR FURTHER see Notification (Form PCT/ISA/:	of Transmittal of International Search Report 220) as well as, where applicable, item 5 below.					
International application No.	International filing date (day/month/year)	(Earliest) Priority Date (day/month/year)					
PCT/GB 00/02285	22/06/2000	22/06/1999					
Applicant ROCEP LUSOL HOLDINGS LIMITED							
according to Article 18. A copy is being to This International Search Report consists							
Basis of the report							
a. With regard to the language, the language in which it was filed, un	international search was carried out on the ba less otherwise indicated under this item.	asis of the international application in the					
the international search v Authority (Rule 23.1(b)).	vas carried out on the basis of a translation of	the international application furnished to this					
was carried out on the basis of the contained in the internation of the fundament of the contained in the internation of the statement that the subsequently to the statement that the subsequently of the statement that the informational application of the statement that the informational of the statement that the information of the statement that the information of the statement of the st	b. With regard to any nucleotide and/or amino acld sequence disclosed in the international application, the international search was carried out on the basis of the sequence listing: contained in the international application in written form. filed together with the international application in computer readable form. furnished subsequently to this Authority in written form. turnished subsequently to this Authority in computer readable form. the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished. the statement that the information recorded in computer readable form is identical to the written sequence listing has been						
2. Certain claims were for 3. Unity of invention is lace	und unsearchable (See Box I). cking (see Box II).						
4. With regard to the title, the text is approved as submitted by the applicant. The text has been established by this Authority to read as follows: DEVICE FOR INTRODUCING A PREDETERMINED DOSE OF ADDITIVE INTO A PACKAGED LIQUID							
the text has been established	5. With regard to the abstract , The text is approved as submitted by the applicant. the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.						
as suggested by the applicant fa		1a, 1d None of the figures.					

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CLASSIFICATION OF SUBJECT MATTER PC 7 B65D51/28 B65D B65D79/00 B65D47/20 According to International Patent Classification (IPC) or to both national classification and IPC **B. FIELDS SEARCHED** Minimum documentation searched (classification system followed by classification symbols) IPC 7 B65D Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) **EPO-Internal** C. DOCUMENTS CONSIDERED TO BE RELEVANT Relevant to claim No. Citation of document, with indication, where appropriate, of the relevant passages Category ° 1-4,14X WO 98 56678 A (HAWTHORNE DONN BEDE ;CARLTON & UNITED BREWERIES (AU)) 17 December 1998 (1998-12-17) 5-11,13, Y the whole document 16 5,6,16 US 5 725 896 A (BANKS ANTHONY J) Y 10 March 1998 (1998-03-10) the whole document WO 97 21605 A (ROCEP LUSOL HOLDINGS Y ;FRUTIN BERNARD D (GB)) 19 June 1997 (1997-06-19) the whole document 8-11,13US 4 592 493 A (SMITH ROBERT C) Y 3 June 1986 (1986-06-03) the whole document 12 Further documents are listed in the continuation of box C. Patent family members are listed in annex. X Special categories of cited documents : T* later document published after the international filing date or priority date and not in conflict with the application but "A" document defining the general state of the art which is not considered to be of particular relevance cited to understand the principle or theory underlying the invention "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone filing date document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such docu-"O" document referring to an oral disclosure, use, exhibition or ments, such combination being obvious to a person skilled in the art. *P* document published prior to the international filing date but later than the priority date claimed *&* document member of the same patent family Date of mailing of the international search report Date of the actual completion of the international search 20/10/2000 3 October 2000 **Authorized officer** Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016 Pernice, C



Interponal Application No PCT/GB 00/02285

	ation) DOCUMENTS CONSIDERED TO BE RELEVANT		Relevant to claim No.
ategory °	Citation of document, with indication, where appropriate, of the relevant passages		TOO VALLE TO CHAIRT 140.
	EP 0 835 840 A (GUINNESS BREWING WORLDWIDE) 15 April 1998 (1998-04-15) column 13, line 4 - line 43; figures 7,8	-	1-7
\	US 4 917 267 A (LAVERDURE ROLAND J A) 17 April 1990 (1990-04-17) the whole document		8–13
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Information on patent family members

Into onal Application No PC I/GB 00/02285

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	atent document d in search report		Publication date	Patent family member(s)	Publication date
WO	9856678	Α	17-12-1998	AU 7751498 A	30-12-1998
				AU 7751598 A	30-12-1998
				WO 9856679 A	17-12-1998
US	5725896	Α	10-03-1998	AT 153961 T	15-06-1997
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				AU 5864194 A	15-08-1994
				CA 2154651 A	04-08-1994
				DE 69403628 D	10-07-1997
				DE 69403628 T	29-01-1998
				DK 680448 T	29-12-1997
				EP 0680448 A	08-11-1995
				ES 2105627 T	16-10-1997
				WO 9416966 A	04-08-1994
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				EP 0958187 A	24-11-1999
US	4592493	A	03-06-1986	NONE	
FP	0835840	Α	15-04-1998	GB 2293166 A	20-03-1996
				AU 689619 B	02-04-1998
				AU 3064195 A	28-03-1996
				CA 2158308 A	16-03-1996
				DE 69503446 D	20-08-1998
				DE 69503446 T	15-04-1999
				DE 69514842 D	02-03-2000
				DE 69514842 T	06-07-2000
				EP 0701966 A	20-03-1996
				ES 2118506 T	16-09-1998
				ES 2143828 T	16-05-2000
				NZ 272996 A	29-01-1997
115	4917267	A	17-04-1990	NONE	

PATENT COOPERATION TREAT

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

	Applicant's or agent's file reference	FOR FURTHER see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.					
	P24038A/GMU	ACTION					
	International application No.	International filing date (day/month/year)	(Earliest) Priority Date (day/month/year)				
	PCT/GB 00/02285	22/06/2000	22/06/1999				
	Applicant						
	ROCEP LUSOL HOLDINGS LIMI	IED					
	This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.						
	This International Search Report consists X It is also accompanied by	of a total of sheets. a copy of each prior art document cited in this	report.				
	Basis of the report						
	 a. With regard to the language, the language in which it was filed, unlined. 	international search was carried out on the bas ess otherwise indicated under this item.	is of the international application in the				
	the international search w Authority (Rule 23.1(b)).	as carried out on the basis of a translation of th	ne international application furnished to this				
	• , , , , , , , , , , , , , , , , , , ,		ternational application, the international search				
	contained in the international application in written form.						
filed together with the international application in computer readable form.							
	furnished subsequently to this Authority in written form. furnished subsequently to this Authority in computer readble form. the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the						
	international application a	sequently furnished written sequence listing do s filed has been furnished.	bes not go beyond the disclosure in the				
	the statement that the info furnished	ermation recorded in computer readable form is	identical to the written sequence listing has been				
	Certain claims were four	nd unsearchable (See Box I).					
	3. Unity of Invention is laci	king (see Box II).					
	4. With regard to the title ,						
	the text is approved as su	bmitted by the applicant.					
	the text has been established	hed by this Authority to read as follows:					
	DEVICE FOR INTRODUCING	A PREDETERMINED DOSE OF AD	DITIVE INTO A PACKAGED LIQUID				
	5. With regard to the abstract,						
	the text is approved as submitted by the applicant.						
	the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.						
	6. The figure of the drawings to be publi	ished with the abstract is Figure No.	1a,1d				
	as suggested by the applic	cant.	None of the figures.				
	because the applicant faile	ed to suggest a figure.					
	. X because this figure better	characterizes the invention.					

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 B65D51/28 B65D79/00

B65D47/20

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) I PC $\,\,7\,$ B65D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Х	WO 98 56678 A (HAWTHORNE DONN BEDE ;CARLTON & UNITED BREWERIES (AU)) 17 December 1998 (1998-12-17)	1-4,14
Υ	the whole document	5-11,13, 16
Y	US 5 725 896 A (BANKS ANTHONY J) 10 March 1998 (1998-03-10) the whole document	5,6,16
Y	WO 97 21605 A (ROCEP LUSOL HOLDINGS; FRUTIN BERNARD D (GB)) 19 June 1997 (1997-06-19) the whole document	7
Υ	US 4 592 493 A (SMITH ROBERT C) 3 June 1986 (1986-06-03)	8-11,13
Α	the whole document	12
	-/- -	

X Further documents are listed in the continuation of box C.	Patent family members are listed in annex.
 Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed 	 "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "&" document member of the same patent family
Date of the actual completion of the international search	Date of mailing of the international search report
3 October 2000	20/10/2000
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer Pernice, C

rternational Application No PCT/GB 00/02285

	on) DOCUMENTS CONSIDERED TO BE RELEVANT	Relevant to claim No.	
Category °	Citation of document, with indication, where appropriate, of the relevant passages	nelevant to claim No.	
	EP 0 835 840 A (GUINNESS BREWING WORLDWIDE) 15 April 1998 (1998-04-15) column 13, line 4 - line 43; figures 7,8	1-7	
	US 4 917 267 A (LAVERDURE ROLAND J A) 17 April 1990 (1990-04-17) the whole document	8-13	
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Jormation on patent family members

PCT/GB 00/02285

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9856678 A	17-12-1998	AU 7751498 A AU 7751598 A WO 9856679 A	30-12-1998 30-12-1998 17-12-1998
US 5725896 A	10-03-1998	AT 153961 T AU 684488 B AU 5864194 A CA 2154651 A DE 69403628 D DE 69403628 T DK 680448 T EP 0680448 A ES 2105627 T WO 9416966 A	15-06-1997 18-12-1997 15-08-1994 04-08-1994 10-07-1997 29-01-1998 29-12-1997 08-11-1995 16-10-1997 04-08-1994
WO 9721605 A	19-06-1997	AU 1182197 A EP 0958187 A	03-07-1997 24-11-1999
US 4592493 A	03-06-1986	NONE	
EP 0835840 A	15-04-1998	GB 2293166 A AU 689619 B AU 3064195 A CA 2158308 A DE 69503446 D DE 69503446 T DE 69514842 D DE 69514842 T EP 0701966 A ES 2118506 T ES 2143828 T NZ 272996 A	20-03-1996 02-04-1998 28-03-1996 16-03-1996 20-08-1998 15-04-1999 02-03-2000 06-07-2000 20-03-1996 16-09-1998 16-05-2000 29-01-1997
US 4917267 A	17-04-1990	NONE	



PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	FOR FURTHER See Notific (Form PC	ation of Transmittal of International Search Report T/ISA/220) as well as, where applicable, item 5 below.				
International application No.	International filing date (day/month/ye	ar) (Earliest) Priority Date (day/month/year)				
PCT/GB 00/02285	22/06/2000	22/06/1999				
Applicant						
ROCEP LUSOL HOLDINGS LIMI	TED					
This International Search Report has bee according to Article 18. A copy is being tra	n prepared by this International Search ansmitted to the International Bureau.	ng Authority and is transmitted to the applicant				
This International Search Report consists It is also accompanied by	of a total of sheets a copy of each prior art document cited					
Basis of the report		the best of the table and a second se				
a. With regard to the language, the language in which it was filed, un	international search was carried out on less otherwise indicated under this item	the basis of the international application in the				
the international search w Authority (Rule 23.1(b)).	ras carried out on the basis of a transla	ion of the international application furnished to this				
1	nd/or amino acid sequence disclosed e sequence listing :	n the international application, the international search				
	onal application in written form.					
filed together with the inte	ernational application in computer reada	ble form.				
	this Authority in written form.	•				
	this Authority in computer readble forr					
the statement that the sul international application a	osequently furnished written sequence as filed has been furnished.	isting does not go beyond the disclosure in the				
the statement that the info furnished	ormation recorded in computer readable	e form is identical to the written sequence listing has been				
2. Certain claims were fou	nd unsearchable (See Box I).					
3. Unity of Invention is lac	king (see Box II).					
4. With regard to the title,						
the text is approved as su						
	shed by this Authority to read as follows					
DEVICE FOR INTRODUCING A PREDETERMINED DOSE OF ADDITIVE INTO A PACKAGED LIQUID						
5. With regard to the abstract,						
X the text is approved as submitted by the applicant.						
the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.						
6. The figure of the drawings to be pub		1a,1d				
as suggested by the appl		None of the figures.				
because the applicant fai						
because this figure better characterizes the invention.						